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## **BUY**

LIR: TSX: C\$4.00

**TARGET PRICE: C\$7.00** 

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**Metals and Mining -- Base Metals and Minerals** 

# Labrador Iron Mines Holdings Ltd.

# Initiating with a BUY; Low capital cost and historically proven iron ore

We are initiating coverage of Labrador Iron Mines Holdings with a BUY rating and a 12-month target price of C\$7.00. The company is fully financed to reactivate the historical Iron Ore Company of Canada operations around Schefferville in north-western Labrador, Canada. The project includes eight separate deposits which contain historical resources of 91 million tonnes of hematite ore. Processing requirements are minimal, and transportation infrastructure is largely in place. The company expects first production in 2009.

We are forecasting seaborne iron ore prices to increase 35% over the next two years, and recognize risks balanced to the upside from these forecasts. Chinese iron ore imports remain strong, and Australian and Brazilian production costs continue to appreciate with their currencies and with widespread mining cost inflation. The mining majors' confidence in the continued strength of the iron ore market is obvious as they continue to re-invest profits back into expanded capacity, at greatly increased capital costs, and we expect Labrador Iron Mines to be in production with iron ore prices at still elevated levels. We expect payback of initial capital within the first full year of production.

LIM Holding's capital intensity of US\$22 per annual tonne of lump and fines ore is the lowest of a range of potential projects we have reviewed, with access to an existing deep water port, rail line and local infrastructure translating to low start-up capital costs.

Our NPV10 valuation of C\$6.81 is based on a 10% discount rate. We see potential permitting delay as the major downside risk. If we were to assume a one-year delay to first production, (and therefore deferred CAPEX spend), our NPV10 would be down about 19% to C\$5.53. Near-term valuation upside could come from 2008 iron ore price settlements higher than the 30% we have modeled.

Canaccord Adams is the global capital markets group of Canaccord Capital Inc. (CCI: TSX|AIM)

The recommendations and opinions expressed in this Investment Research accurately reflect the Investment Analyst's personal, independent and objective views about any and all the Designated Investments and Relevant Issuers discussed herein. For important information, please see the Important Disclosures section in the appendix of this document or visit <a href="http://www.canaccordadams.com/research/Disclosure.htm">http://www.canaccordadams.com/research/Disclosure.htm</a>.

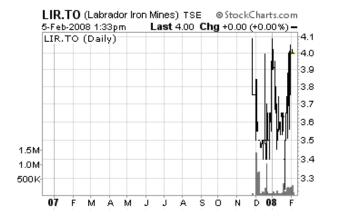
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## **Company Statistics**

52-week Range: Market Cap (M): C\$3.25-4.09 C\$148.8





## **Earnings Summary**

FYE Mar	2009E	2010E	2011E	2012E
Iron ore fine (US\$/tonne):	NA	75	75	63
Iron ore lump (US\$/tonne):	NA	91	90	76
Adj. fd EPS:	(0.17)	0.49	1.02	1.16
P/Adj. fd EPS (x):	NM	8.2	3.9	3.4
Oper. CFPS:	(0.13)	0.50	1.04	1.19
P/Oper. CFPS (x):	NM	8.0	3.8	3.4
Free CFPS:	(0.13)	0.50	1.03	1.18
P/FCF (x):	NM	8.1	3.9	3.4

## **Company Description**

Labrador Iron Mines Holdings Ltd plans to re-activate the Schefferville iron ore project in north-western Labrador, Canada. The project includes eight separate deposits which contain historical resources of 91 million tonnes of hematite ore. Processing requirements are minimal, and transportation infrastructure is largely in place. The company expects first production in 2009.



## INVESTMENT SUMMARY

Labrador Iron Mines Holdings Ltd (LIM Holdings) is set to become an important part of the Canadian iron ore rejuvenation story. Driven by growth in global steel and seaborne iron ore demand, the company is re-activating the Schefferville iron ore project in the Labrador Trough in Canada, and aims to start delivery of direct shipping ore to European markets during 2009. LIM Holdings is fully financed, following its successful IPO in December 2007.

Capital intensity of US\$22 per annual tonne of production is by far the lowest of a range of potential projects we have reviewed. C\$30 million capital investment is needed to achieve 2.8 million tpa of lump and fines product by 2012, with a further C\$30 million then needed to maintain that production. Expansion is probable beyond 2.8 million tpa. Infrastructure is largely in place, with access to an existing deep water port and rail line translating to low capital start-up costs.

The Schefferville project is effectively a "brownfields" development of a previously mined, well-known Canadian iron ore resource. NI 43-101 resource definition is still pending, and metallurgical test work has only just begun. However, the 1954-1982 operating history of The Iron Ore Company of Canada lends confidence to historical resource estimates of some 91 million tonnes of ore, and to the acceptability of the product.

Our NPV $_{10}$  valuation of C\$6.81 is based on a 10% discount rate. Given the virtual absence of financing risk, we believe a 10% discount rate adequately captures permitting, construction and operating assumptions risk. With successful project implementation, we would eventually lower our discount rate to 8%. For comparison, our NPV $_8$  valuation would be C\$7.46.

We see potential permitting delay as the major downside risk. If we were to assume a one-year delay to first production, (and therefore also deferred CAPEX spend), our  $NPV_{10}$  would be down about 19% to about C\$5.53.

Given the variability of iron ore assets, and the lack of comparable direct-shipping companies once LIM Holdings is in production, we are not using comparable P/E or P/CF multiples to determine our valuation. However, we present Figure 1 as an example of potential multiple valuation. F2010 (which is April 2009-March 2010) is based on peak iron ore price forecasts. However, F2011 and F2012 are based on progressively lower iron ore price forecasts, and as such F2011 and F2012 earnings and cash flows would be expected to be valued at progressively higher multiples.

Based on 5x our forecast F2011 earnings and operating cash flows, (using the same multiple for both, as depreciation charges should be extremely low), or 6x for F2012 and beyond, plus net cash, we can foresee a share price in the range of C\$9.00-10.00 on a two- to four-year view.



Figure 1: Potential multiple valuation 2011E 2014E Multiple valuation FYE March 2008E 2009E 2010E 2012E 2013E 0.00 (0.17) 0.49 1.02 0.84 0.86 1.16 ...at a multiple of 4.0 5.0 6.0 6.0 6.0 P/E valuation is 1.96 5.12 6.96 5.04 5.17 CFPS 0.00 (0.13)0.50 1.04 1.19 0.87 0.89 ...at a multiple of 6.0 6.0 4.0 5.0 6.0 P/CF valuation is 1.99 5.20 7.11 5.21 5.34 1.98 5.16 7.04 5.26 Average valuation 5.13 1.03 0.74 net cash per share, start of year 0.77 1.80 2.98 3.37 plus cash from warrants & options 1.04 1.04 1.04 1.04 1.04 multiple valuation plus the cash 3.75 6.97 9.88 9.14 9.67

Source: Canaccord Adams estimates

Our key operational and financial forecasts, and our iron ore pricing assumptions, are presented as Figure 2.

Figure 2: Labrador Iron Mines Key	operational and financial forecasts,	and pricing assumptions

Table 1: Financial summary, FYE March		2008E	2009E	2010E	2011E	2012E	2013E	2014E
Sales revenue	C\$million	-	-	63.4	128.8	167.0	160.2	160.2
Operating expenses	C\$million	0.4	7.3	30.0	58.7	89.0	106.2	105.5
EBITDA	C\$million	(0.4)	(11.3)	33.4	70.1	77.9	53.9	54.7
Net income								_
Net earnings	C\$million	0.1	(6.4)	23.5	49.2	55.8	40.4	41.4
EPS (basic)	C\$ps	0.00	(0.17)	0.63	1.32	1.50	1.09	1.11
EPS (diluted)	C\$ps	0.00	(0.17)	0.49	1.02	1.16	0.84	0.86
Shares on issue - diluted	million		48.0	48.0	48.0	48.0	48.0	48.0
Cash	C\$million	49.5	35.5	36.8	86.4	143.0	161.8	196.7
Net debt (cash)	C\$million	(49.5)	(35.5)	(36.8)	(86.4)	(143.0)	(161.8)	(196.7)
Capex	C\$million	0.1	7.5	22.6	0.4	0.4	22.9	7.9
Cash flow from operations	C\$million	0.1	(6.4)	23.8	49.6	56.5	41.3	42.4
CFPS (diluted)	C\$ps	0.00	(0.13)	23.6 0.50	1.04	1.19	0.87	0.89
CFPS (alluted)	C\$ps	0.00	(0.13)	0.50	1.04	1.19	0.87	0.89
Table 2: Key input variables		2008E	2009E	2010E	2011E	2012E	2013E	2014E
Production fines ore	million dry tonnes	-	-	0.6	1.3	1.9	2.2	2.2
Production lump ore	million dry tonnes	-	-	0.2	0.3	0.5	0.6	0.6
Total product production	million dry tonnes	-	-	0.8	1.6	2.4	2.8	2.8
Fines sales	million dry tonnes	-	-	0.6	1.3	1.9	2.2	2.2
Lump sales	million dry tonnes	-	-	0.2	0.3	0.5	0.6	0.6
Total product sales	million dry tonnes	-	-	0.8	1.6	2.4	2.8	2.8
Fines price (per Fe%)	UScents/dmtu			117.9	116.8	98.3	78.6	78.6
Lump price (per Fe%)	UScents/dmtu			144.4	143.0	120.3	96.3	96.3
Fines price (per tonne)	US\$/tonne			75.5	74.7	62.9	50.3	50.3
				91.0	90.1	75.8	60.6	60.6
Lump price (per tonne)	US\$/tonne			91.0	30.1	10.0	00.0	00.0
Lump price (per tonne)  Average product price	US\$/tonne US\$/tonne			78.6	77.8	65.5	52.4	52.4
	•							

Source: Canaccord Adams estimates



# COMPANY DESCRIPTION AND SHARE STRUCTURE

Labrador Iron Mines Holdings Ltd is a subsidiary of Anglesey Mining, a UK-based exploration and development company. LIM Holdings was listed on the TSX Exchange in December 2007 through an Initial Public Offering of 13,193,950 shares at C\$4.00 each. The company's TSX ticker is LIR. Following the IPO, Anglesey Mining has retained a 50.01% interest in LIM Holdings.

The IPO included free trading half-warrants, exercisable at a share price of C\$5.00 any time prior to December 3, 2009. Anglesey Minings' ownership of LIM Holdings is 38.73% on a fully diluted basis. LIM Holding's share structure is presented as Figure 3.

LIM Holdings mining asset is a 100% interest in the Schefferville Project, which comprises eight iron ore properties in north-west Labrador, Canada. The properties are divided into 29 mining licenses covering 140 mining claims. They were previously owned by the Iron Ore Company of Canada (IOCC), now 59% owned by Rio Tinto.

Through a series of option agreements entered into over the two-year period from September 2005, Anglesey Mining and its subsidiary LIM Holdings earned a 77.5% interest in the Schefferville Project. The remaining 22.5% has been transferred to 5.4 million common shares of LIM Holdings, amounting to 14.52% of outstanding shares, equally held by Kensam and 3222594 Canada Inc, two private companies formed in 2005 specifically to hold some of the Schefferville properties.

Excluding the Anglesey Mining, Kensam and 3222594 Canada Inc interests, LIM Holdings free float is 13.1 million shares or 35.5%. Passport Capital is the major institutional shareholder. According to a January 9, 2008 filing, at that time Passport controlled 3.4 million shares and 0.3 million warrants.

Figure 3: LIM Holdings share structure

	Bloomberg Ticker	Exercise price (C\$)	Expiry date
Shares On Issue			
37,193,951	LIR CN		
<u>Warrants</u>			
6,596,975	LIR-W CN	5.00	Dec-09
857,608	3	4.00	Jun-09
428,802	2	4.00	Jun-09
<u>Options</u>			
2,950,000	)	4.00	Aug-12
Fully Diluted shares			
48,027,336	3		

Source: Company data



## THE SCHEFFERVILLE PROJECT

Labrador Iron Mines' project is located on the Labrador Trough, in Newfoundland and Labrador, but close to the Quebec town of Schefferville. The project comprises a number of hematite iron ore deposits stretching within a 65-kilometre radius of Schefferville. The company holds 29 Mineral Rights Licences, issued by the government of Newfoundland and Labrador.

The Iron Ore Company of Canada (IOCC) began operating mines in the Schefferville region in 1954, producing unprocessed 56-58% iron ore, and exporting the product directly to steel companies in the USA and Western Europe. The properties and iron deposits that currently form LIM Holdings' Schefferville Project were part of the original IOCC Schefferville area reserves and resources.

During the 1960s, higher-grade iron deposits in Australia and South America started producing, and consumers shifted to products with >62% iron content. In 1963, IOCC developed the Carol Lake deposit near Labrador City, located further south than Schefferville and closer to the ports, and began producing 64% iron concentrates and pellets. Interest and markets for the direct shipped Schefferville ores declined, and IOCC closed the Schefferville mines in 1982.

From 1954-1982, 152 million tons of ore were mined in the Schefferville area. Based on the historical IOCC ore resource definition, approximately 200 million tons of iron resources remain around Schefferville, exclusive of low-grade magnetite taconite. LIM Holdings has acquired rights to approximately half of this resource.

The LIM Holdings' properties are located in an area on the western margin of the Labrador Trough referred to as the "Knob Lake Iron Range". The Knob Lake Range consists of tightly folded and faulted iron-formation exposed at surface along the height of land forming the boundary between Quebec and Labrador. The iron deposits occur in deformed segments of iron-formation, and the ore content of single deposits varies from a million to more than 50 million tonnes.

LIM has identified resources in eight deposits, which it intends to develop sequentially over the life of the project. These can be further defined into three geographical clusters; four deposits located within a 20km radius of Schefferville (James, Knob Lake, Houston and Richmond), two deposits located 50 kilometres and 65 kilometres to the south east (Sawyer Lake and Astray Lake) and two deposits located 25 kilometres and 45 kilometres to the north west (Howse and Kivivic). Historically, IOCC undertook excavation or predevelopment work on or adjacent to all the properties other than Sawyer and Astray.

The current resource estimate of 85-89 million tonnes, (exclusive of 3-4 million tonnes on adjacent claims), as outlined in the company's IPO Prospectus, is based on estimates made by IOCC in 1982 and published in their Direct-Shipping Ore Reserve Book of 1983. SNC Lavelin reviewed these estimates as part of an October 2007 *Technical Report*, and presents them as historic estimates, as shown as Figure 5.

These resource estimates do not meet NI 43-101 definition standards. However, SNC Lavelin notes that "There is no reason to conclude that IOCC utilized other than best industry practices. It is reasonable, therefore, to conclude that such historic resources can be easily brought to compliance with NI 43-101 requirements with a program of verification ...". Based on historical operations, the company anticipates average ore



grades of 56-58% iron to be achieved. We note that an independent audit was carried out in mid-2006 on the James Deposit by Wardrop Engineering.

Figure 4: Location map of the Schefferville Project





Source: Company presentation

Figure 5: Historical IOCC resources	for the Schefferville Project, 1983

Deposit		'000 t
James	M&I	About 7/8 of 4,486
Houston	M&I	About 2/3 of 9,090
Redmond	M&I	1,357
Knob Lake	M&I	3,662
Sawyer Lake	Inferred	12,000
Astray Lake	Inferred	3,909 - 7,818
Howse	Inferred	28,288
Kivivic	Inferred	26,258
Total		85-89,000

Notes: i) IOCC resource definition based on +50% Fe <18% SiO<sub>2</sub> dry basis, ii) Measured & Indicated v. Inferred is based on historic IOCC definitions, iii) the balance of James and Houston resources lies on adjacent claims held by others.

Source: SNC Lavalin Technical Report of October, 2007.



## LOGISTICS AND INFRASTRUCTURE

The properties are located within a 65-kilometre radius of Schefferville, Quebec. The town was established by IOCC to support its regional mining operations. All but Astray Lake and Sawyer Lake are connected by road. Access to Schefferville is by rail or air.

Iron ore will be transported from Schefferville to the port at Sept-Îles via a 569-kilometre railway, first constructed in the 1950s and operated by Québec North Shore and Labrador Railway (QNS&L), a 100%-owned subsidiary of IOCC. IOCC sold a 205-kilometre section of the railway (from Schefferville south to Ross Bay Junction) to Tshiuetin Rail Transportation Inc. (TRTI), a First Nations company, in November 2005. LIM Holdings has already entered into a Memorandum of Understanding with TRTI to provide rail transportation and other related infrastructure services, including storage and loading facilities services at the port of Sept-Îles. We expect TRTI to also negotiate rail access along the remaining QNS&L Railway, south from Ross Bay Junction to Sept-Îles.

The TRTI railway currently operates a mixed passenger freight train twice a week. Iron ore has not been transported since 1982. Given the age of the TRTI railway and twenty years of limited capital investment, the track will require some degree of accelerated maintenance – a 2006 study carried out by Hatch Mott MacDonald concluded that the railway is in relatively good condition, although an estimated C\$23 million of capital will need to be spent over the first ten years to ensure ongoing reliability, based on 1 million tonnes of shipments in the first year increasing to 5 million tonnes pa over a five year period.

The QNS&L Railway has carried 40 million tpa in the past, such that the current utilization rate is about 50%. The combination of expansion plans at IOCC, and new production from LIM Holdings and Consolidated Thompson (CLM: TSX: C\$6.00 | BUY) would increase capacity utilization rates to around 80%, such that accelerated maintenance may become an issue for QNS&L as well. QNS&L is a common carrier under the Canada Transportation Act, such that it is obliged to offer commercially reasonable terms to third parties for use of the track. It already does so for Wabush Mines, and has agreed to do so for Consolidated Thompson.

LIM also plans to rehabilitate the train loading area near Schefferville previously operated by IOCC, a facility called "The Silver Yards" located approximately 2.5 miles off the main line. (Hatch estimated a C\$3.4-3.7 million cost to replace the track on the existing grade and sub-ballast, and a C\$6.3-6.8 million cost for a rail loading and turnaround facility.) It is anticipated that the processing facility and related services for the James, Houston, Knob Lake and Redmond deposits will be established close to the Silver Yards. Several old ICOO pits could be used as a source of process water and act as tails storage.

Three processing sites are envisioned for the total life of the project: the first at Silver Yards, the second near Astray Lake and the third near the Howse and Kivivic properties. Development of the Sawyer Lake and Astray Lake deposits would require the installation of about 50 kilometres of road for haulage to Silver Yards, and would include a second crushing, screening and washing facility. Development of the Howse and Kivivic properties could require the installation of some 45 kilometres of road, conveyor or additional rail track, although the grade is already in place for about 20 kilometres of



this. The Howse / Kivivic site could utilize processing equipment moved from the Silver Yards.

The port of Sept-Îles on the St. Lawrence River handles ocean-going vessels up to 300,000 tonnes and is maintained as an ice free port. We note that access to either of the two ports handling iron ore pellets and concentrates needs to be negotiated with owners IOCC or Wabush Mines (now controlled by Arcelor Mittal), or a new facility constructed. IOCC also owns a third non-operating direct-shipped ore port at Sept-Îles.

The Menihek power plant located 35 kilometres southeast from Schefferville is the only provider of electric power to the area. The hydro power plant was built to support iron ore mining and services in Schefferville and LIM expects the processing site planned on the Silver Yards will draw power from the main substation.



## **DEVELOPMENT PLANS**

2008 work plans include a drilling program to commence in May, NI 43-101 resource definition, and feasibility/engineering studies. NI 43-101 resource definition will include the James, Redmond, Knob Lake and Houston deposits. It may include the Sawyer Lake, Astray Lake and Howse deposits. It will not include the Kivivic deposit. Feasibility studies are planned for James, Redmond, Knob Lake and maybe Houston. Feasibility studies will include reserve definition, mining plans and economic assumptions. Consultants are yet to be appointed for this work.

Permitting will be a 2008 focus. Permit applications for James and Redmond are likely to be submitted to the Federal and the Newfoundland & Labrador authorities within the next month or so, and we expect Environmental Impact Studies will be required despite the brownfield nature of the early deposits. We understand that the provincial authorities have already informally accepted that screening and washing is sufficient downstream processing. Net impact / benefit agreements are also needed with First Nations groups. The company acknowledges several First Nations groups in the immediate area of the properties.

Three key Toronto or Montreal hires will be made responsible for project management, transportation management, and environmental and permitting management.

Labrador Iron Mines then intends to develop the properties in three capital phases, prioritising development of the eight deposits on the basis of location, the level of current knowledge base, and infrastructure availability:

- Phase 1a James and Redmond, 5 million tonnes of M&I resource, two to three kilometres from the railway, and partially pre-stripped.
- Phase 1b Knob Lake and Houston, 10 million tonnes of M&I resource, 2 and 20km from the railway.
- Phase 2 Sawyer Lake and Astray Lake, 16-20 million tonnes of inferred resource, 65 kilometres and 50 kilometres from Schefferville.
- Phase 3 Howse and Kivivic, 55 million tonnes of inferred resource, 25 kilometres and 45 kilometres from Schefferville.

Subject to permitting, LIM Holdings expects first production in 2009, ramping up to 3.5 million tpa run-of-mine production by 2012, with the potential to increase production further to 6 million tpa ROM. The company is planning conventional open-pit contract mining and contract processing, upgrading to 64-65% iron content by washing, and transportation by 100-car ore trains about five times per week. Given potential problems with freezing in ore trains, operations will be limited to an eight-month season.



## PROJECT OPERATING PARAMETERS

We have used the following operating parameters in our valuation model. These assumptions are based largely on company guidance, the Hatch Mott MacDonald rail infrastructure study, industry project comparisons and Canaccord Adams estimates. Feasibility studies are required to validate many of these assumptions.

#### Reserves

We are assuming 70% resources to reserves conversion, for 60-62 million tonnes of reserve.

#### **Production**

We are assuming Phase I start-up in C2009, with production of about 1 million tpa runof-mine, increasing to 2 mtpa in 2010, 3 mtpa in 2011 and then 3.5 mtpa from 2012. We are assuming total Phase I CAPEX of C\$30 million.

We are assuming a further C\$30 million of CAPEX during C2012 and 2013 for the transition to Phase II deposits, as we are assuming Phase I deposits will be depleted during 2013. We are assuming Phase II deposits will then be depleted sometime during C2016 or 2017.

We are assuming a further C\$60 million of CAPEX during C2016 and 2017 to enable transition to Phase III deposits, at an accelerated production rate of 6 million tpa run-of-mine, for ultimate resource exhaustion in 2024.

## Mine plan

We are assuming a strip ratio of 1:1. The orebodies are close to surface and associated with strong, competent rock conditions. Further engineering and pit planning is required in order to verify this assumption. At this stage, we are assuming a consistent strip ratio throughout the life of operations, although the company expects a lower strip ratio in the early years, particularly at James and Redmond, while the later Howse deposit could be as high as 3:1.

## **Final product**

We are assuming a lump / fines ratio of 20/80. Further resource evaluation is required in order to verify this assumption. At this stage, we are assuming a consistent lump / fines ratio throughout the life of operations, although the company expects the harder than average Sawyer and Astray Lakes orebodies to yield a higher proportion of lump. The company is targeting a 64% Fe content lump product and a 65% Fe content fines product, from ore grading 56-58%. We are assuming 63% and 64%, from ore grading 57%. Again, we are at this stage assuming consistency through the life of the operation, pending feasibility study information. We are assuming 3% moisture content during transportation.

## **Processing**

We are assuming total iron recovery of 88% and weight recovery of 79%. Thus, 3.5 million tpa ROM would yield 2.8 million tpa of saleable product. Again, we are at this stage assuming consistency throughout the life of the operation, pending feasibility study information. The conceptual process design – relatively simple crushing, screening and washing – is based only on recent limited bench-scale testing, performed on samples of



James deposit mineralisation and historical work carried out by IOCC. Our analysis assumes uniform liberation and iron recovery, while it is likely that these will vary depending on the changing characteristics of the different deposits.

## **Operating costs**

We are assuming operating costs of C\$32 per tonne of product, proportioned as shown in Figure 6, slightly higher than the company's expectation of under US\$30 per product tonne. For the purposes of our base case valuation, we have kept costs flat over the life of the mine. However, we would expect annual variations mainly due to the timing of prestripping and haulage costs of ore. The company believes that annual unit operating costs over the mine life are likely to vary by up to +/- 10% depending on the stage of development – the highest cost is most likely to be related to stripping at the Howse deposit during the middle years of production, while costs are likely to be lower during the later production years. Start-up production costs are likely to benefit from low initial stripping and short haulage distances, which we assume will offset the normal start-up inefficiencies.

C\$1/t is built into rail cost assumptions to cover the C\$23 million maintenance capital requirement over the first ten years of operation. A further C\$1.50/t covers the cost of leasing the rolling stock.

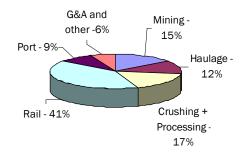
## **Development expenses**

We are assuming C\$11 million of operating expenses in C2008: C\$5 million for exploration, C\$4 million for engineering and feasibility studies, and C\$2 million for salaries and general office expenses.

## **Royalties and taxes**

A sales royalty of 3%, to a maximum of US\$1.50 per product tonne, is payable over the life of operations. We are assuming a 31.5% corporate tax rate, payable almost immediately upon profitability, due to the assets' low cost base and low capital requirements.

Figure 6: Estimated breakdown of total operating costs



Source: Canaccord Adams estimates



## **IRON ORE PRICING ASSUMPTIONS**

Our iron ore price assumptions are shown in Figure 7. These prices are based on benchmark prices for Brazilian lump and fines delivered into Europe. Given LIR Holding's location, we would expect strongest interest in off-take agreements to be from Europe and North America, to which a Canadian producer would enjoy a freight advantage over Brazilian producers. Typically, IOCC and QCM have been able to negotiate small premiums over CVRD's prices for deliveries into Europe, based on that freight differential.

At this stage, we are assuming all of LIM Holding's sales will be into Europe. Demand from China's steel industry remains strong, such that we would expect the company to also pursue opportunities for off-take agreements in the Far East, but we would expect lower prices for any such sales than those achieved for sales into Europe.

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		2003	2004	2005	2006	2007	2008E	2009E	2010E	2011E	2012 & LTE
VRD southern sinter feed to Europe	USc/dmtu of Fe	31.04	36.45	62.51	74.39	81.46	105.90	111.19	111.19	94.51	75.61
VRD northern sinter feed to Europe	USc/dmtu of Fe	31.95	37.90	65.00	77.35	84.70	110.11	115.62	115.62	98.27	78.62
VRD northern lump to Europe	USc/dmtu of Fe	37.36	44.46	79.58	94.70	103.70	134.81	141.55	141.55	120.32	96.2
nange in fines price	%						30%	5%	0%	-15%	-209
hange in lump price	%						30%	5%	0%	-15%	-20%
OC / QCM benchmark concentrate price	USc/dmtu of Fe	31.75	38.87	66.71	78.25	86.40					
IR fines price assumpion	USc/dmtu of Fe							117.93	116.77	98.27	78.63
IR lump price assumption	USc/dmtu of Fe							144.38	142.97	120.32	96.2
Average LIR received price	US\$/drv tonne							78.57	77.80	65.48	52.38

Source: CVRD, TEX Report, Canaccord Adams estimates



# OPERATING AND FINANCIAL FORECASTS AND SENSITIVITIES, CAPEX AND LIQUIDITY

Our key operating and financial forecasts are summarized in Figure 8. We are assuming start-up during F2010, (April 2009 – March 2010), 2.8 million tpa of product by F2013 and 4.7 mtpa of product by F2018.

Key EPS and CFPS are sensitivities are to iron ore prices, unit production costs and the  $C\$  exchange rate. Looking at FY2012, for which we are forecasting 85% of Phase I / II full production, sensitivities are as follows:

- Iron ore price received +/- 10%; EPS +/- 22% or down, CFPS +/- 20%.
- Unit production cost -/+ 10%; EPS and CFPS up 10% or down 11%.
- C\$/US\$ exchange rate -/+ 10%; EPS up 9% or down 8%, CFPS +/- 8%, based on the assumption that 75% of production costs are denominated in Canadian dollars.

We do not foresee any liquidity issues. Following its successful IPO, we believe LIR Holdings is fully financed without the need for further equity or any debt. We are forecasting a low-point cash balance of C\$28 million at June 2009, allowing plenty of cushion should capital costs be higher than expected or first production delayed.

FYE March		2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E
Sales volume	mt, dry	0.0	0.0	0.8	1.6	2.4	2.8	2.8	2.8	2.8	2.8	4.7
Operating revenue	C\$ million	0.0	0.0	63.4	128.8	167.0	160.2	160.2	160.2	160.2	160.2	274.5
Operating expenses	C\$ million	0.4	7.3	30.0	58.7	89.0	106.2	105.5	105.5	105.5	105.5	179.4
Net income	C\$ million	0.1	(6.4)	23.5	49.2	55.8	40.4	41.4	42.5	43.7	44.4	72.3
EPS (diluted)	C\$ps	0.00	(0.17)	0.49	1.02	1.16	0.84	0.86	0.89	0.91	0.93	1.51
Operating CFPS (diluted)	C\$ps	0.00	(0.13)	0.50	1.04	1.19	0.87	0.89	0.91	0.94	0.95	1.56
Unit price	US\$/t	NA	NA	78.57	77.80	65.48	52.38	52.38	52.38	52.38	52.38	52.38
Unit cost	C\$/t	NA	NA	32.00	32.22	32.36	32.49	32.49	32.49	32.49	32.49	32.49
C\$/US\$		0.97	0.99	0.97	0.94	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Cash balance / net cash	C\$ million	49.5	35.5	36.8	86.4	143.0	161.8	196.7	240.2	277.4	292.8	344.6
CAPEX, (incl.maintnance)	C\$ million	0.0	7.5	22.7	0.8	0.8	23.3	8.3	0.8	8.3	30.8	23.3

Source: Canaccord Adams estimates



## **VALUATION**

We are choosing an NPV valuation for Labrador Iron Mines.

Based on the assumptions outlined earlier in this report, our NPV<sub>10</sub> valuation is C\$6.81.

Given the virtual absence of financing risk, we believe a 10% discount rate adequately captures permitting, construction and operating assumptions risk. With successful project implementation, we would eventually lower our discount rate to 8%. For comparison, our  $NPV_8$  valuation would be C\$7.46.

Key risks to our NPV valuation are iron ore prices, unit production costs, the C\$/US\$ exchange rate, capex overruns and potential delay. Looking at our NPV $_{10}$  of C\$6.81, sensitivities are as follows:

- Iron ore price received +/- 10%; our NPV<sub>10</sub> would be up 24% to C\$8.44, or down 24% to C\$5.18.
- Unit production cost -/+ 10%; our NPV $_{10}$  would be up 14% to C\$7.75, or down 14% to C\$5.88.
- C\$/US\$ exchange rate -/+ 10%; our NPV $_{10}$  would be up 7% to C\$7.30, or down 6% to C\$6.37.
- Capex +10%; our NPV<sub>10</sub> would be down 2% to C\$6.64, and our minimum cash balance forecast would be C\$26 million at June 2009.
- Capex +20%; our  $NPV_{10}$  would be down 5% to C\$6.47, and our minimum cash balance forecast would be C\$25 million at June 2009.
- A one-year delay to production and CAPEX spend; our NPV<sub>10</sub> would be down about 19% to C\$5.53.

Given the variability of iron ore assets, and the lack of comparable direct-shipping companies once LIM Holdings is in production, we are not using comparable P/E or P/CF multiples to determine our valuation. However, we present Figure 9 as an example of potential multiple valuation. F2010 (which is April 2009 – March 2010) is based on peak iron ore price forecasts. However, F2011 and F2012 are based on progressively lower iron ore price forecasts, and as such F2011 and F2012 earnings and cash flows would be expected to be valued at progressively higher multiples.

Based on 5x our forecast F2011 earnings and operating cash flows, (using the same multiple for both, as depreciation charges should be extremely low), or 6x for F2012 and beyond, plus net cash, we can foresee a share price in the range of C\$9.00-C\$10.00 on a 2-4 year view. (And we note here that as we are assuming earnings and cashflows will be fully taxed from the outset, a case could be made for using higher multiples for valuation.)



Figure 9: Potential multiple valuation FYE March 2011E 2012E 2013E 2014E Multiple valuation 2008E 2009E 2010E EPS 0.00 (0.17) 0.49 1.02 0.84 0.86 1.16 ...at a multiple of 5.0 6.0 4.0 6.0 6.0 P/E valuation is 5.17 1.96 5.12 6.96 5.04 CFPS 0.00 (0.13)0.50 1.04 1.19 0.87 0.89 ...at a multiple of 6.0 6.0 4.0 5.0 6.0 P/CF valuation is 1.99 5.20 7.11 5.21 5.34 Average valuation 1.98 5.16 7.04 5.13 5.26 1.03 0.74 0.77 2.98 3.37 net cash per share, start of year 1.80 plus cash from warrants & options 1.04 1.04 1.04 1.04 1.04 3.75 multiple valuation plus the cash 6.97 9.88 9.14 9.67

Source: Canaccord Adams estimates



## **COMPARATIVE ANALYSIS**

We have reviewed a range of iron ore projects planned for development in Australia and Canada in order to compare the Schefferville Project on the basis of capital intensity and operating costs, and to compare the valuation of LIR Holdings on the basis of EV per tonne of contained iron resource, or per tonne of annual production.

Project comparisons are difficult, as the companies are targeting different points of the value chain, from basic direct shipping fines ore all the way to pig iron. Many of the iron ore projects we have reviewed are very long life while others have life of only a few years, and grade differences across different iron ore deposits can have a substantial impact on operating costs, as can the distance and infrastructure availability to market. Further, many of the companies' development plans are in a constant state of change, with design volumes and costs changing through the various phases of pre-construction planning, and as this cycle's extreme mining industry cost inflation quickly renders cost estimates obsolete.

Nonetheless, we present as Figure 11 as a comparison of some of the projects and emerging producers. We have tended to rely on the most recent published data or guidance from the companies involved. Not surprisingly for a DSO operation using existing third party infrastructure, LIR Holdings' capital intensity is the lowest of the companies we have reviewed, and this is the project's key competitive advantage. Operating costs are towards the upper end of the range, reflecting reliance on that third party infrastructure. Perhaps most important for potential investors, EV per tonne of annual production is amongst the lowest.

We also present Figure 10, a range of recent transactions for iron ore assets. Not surprisingly, the range of valuations is huge, at US\$5- US\$35 per resource tonne of iron units, with exploration potential a key differentiator amongst projects. Valuations of US\$41- US\$304 per annual tonne of production is an equally wide range.

We note that LIM Holdings current EV valuation is US\$2 per resource tonne of iron units, and US\$36 per annual tonne of production, lower than any of the transaction values (adjusting for CAPEX, EV of US\$58 pat is still low).



Figure 10: Iron ore transactions

Acquirer		Cleveland Cliffs	Anglo American	Anglo American	Shougang	Sinosteel	Vedanta	Mt.Gibson
Target		MMX Amapa, 30%	MMX Minas-Rio, 49%	MMX Minas-Rio, 51% & Amapa, 70%*	Mt. Gibson (from Gazmetali) *	Midwest **	Sesa Goa	Aztec
Project parameters								
Transaction date		Mar-07	Jul-07	Jan-08	Jan-08	Jan-08	Apr-07	Dec-06
M&I Resource	Mt	73.6	301.3		138.4	573.0	207	75
M&I + Inferred Resource	Mt	178.1	524.4		164.3	576.3	207	92.7
Grade	%	40.41%	39.79%		62.50%	40.29%	63.50%	64.00%
Fe units (M+I+I)	Mt	72.0	208.7	as per	102.7	232.2	131.4	59.3
Annual production	Mt	6.5	26.6	previous	10.0	24.5	10.3	4.0
Product Grade	%	68.20%	68.50%	columns	65.00%	64.00%	64.40%	64.60%
Fe units	Mt	4.4	18.2		6.5	15.7	6.6	2.6
Project Capital Required	US\$M	357	2,354		206	1,405	-	131
Stake acquired		30%	49%	51% & 70%	20%	19%	71%	100%
Paid	US\$M	133	1,150	5,500	179.2	188	1,370	280
Share of resource	Mt Fe units	22	102	157	20	43	93	59
Implied Value	US\$/t Fe unit	6.16	11.25	35.08	8.86	4.32	14.68	4.72
Implied Value	US\$/at production	68.21	88.23	303.60	90.94	40.98	187.34	70.00

Note: \* These 2 deals are not yet closed, \*\* Based on estimated ownership and final share price paid

Source: Company data, some Canaccord Adams estimates



Figure 11: Project comparison analysis

Company		Baffinland (BIM)	Cape Lambert (CFE)	Cindo	lble (GBG)	Grange Resources (GRR)	Michael	est (MIS)	Mt Cibor	on Iron (MGX)	New Millennium (NML)	Australasian Resources (ARH)	Fortescue (FMG)	Con. Thompson (CLM)	MMX Mineracao E Matal (XMM)	MMX Mineracao E	MMX Mineracao E Matal (XMM)	Labrador Iron Mines (LIR)
Company		(DIIVI)	Cape	Mungada	Karara	Southdown/	WILLIAM	Koolanooka	INIT GIDST	Extension Hill	(INIVIL)	resources (Arri)	(I WG)	(OLIVI)	iviatai (Alviivi)	Matai (AMM)	IMALAI (AMINI)	Milles (LIK)
Mine		Mary River	Lambert	Hematite	Magnetite	Kemaman (1)	Weld Range	Magnetite (1)	Koolan Island		LabMag	Balmoral South	Pilbara	Bloom Lake	Corumba	Amapa	Minas-Rio	Schefferville
Full Production		2014	late 2009	2009	2010	2011	2012	2014	Q4/09	2009	2011/12	n.a.	2009	2010	2010	2009	2011	2012
Full Production	'000t	10,000	7,000	2,000	8,000	6,600	20,000	4,500	4,000	3,000	15,000	11,500	45,000	7,000	4,900	6,500	26,600	2,765
1st yr of production		2013	n.a.	Q1/09	Q1/10	n.a.	n.a.	TBA	Jun-08	Q4/07	n.a.	n.a.	mid-2008	2009	2007	2007	2009	2009
1st yr of production	'000t	250	n.a.	1,500	n.a.	3,300	n.a.	n.a.	1,500	1,500	n.a.	n.a.	25,000	5,000	2,200	400	8,000	790
Construction CAPEX	US\$M	1,480	445	96	1,519	1,175	515	890	131	75	2,750	1,780	2,388	415	234	357	2,354	60
Adj. capital intensity	US\$/pat	148.00	63.57	48.10	151.02	128.03	25.77	147.78	32.71	24.92	133.33	154.78	53.06	59.29	47.76	54.92	88.50	21.70
EV	US\$M	252	79	387	387	190	927	927	2089	2089	78	612	19,472	317	7,631	7,631	7,631	99
EV pat @ full production	US\$/pat	25.22	11.32	38.66	38.66	28.78	37.85	37.85	208.95	208.95	5.19	53.21	432.70	45.22	200.81	200.81	200.81	35.98
												24.41 (con)/ 30.73 (pellets)/						
Operating cost	US\$/t	19	26.7	36.28	27.23	42.9	23.65	38.00	26.7	30.26	36.00	81.31 (HBI)	19.67	23.67	31.57	10.00	10.00	30.00
		Lump 75%/	Concentrates	60% Lump/	50% Conc/ 50%	Concentrates/	Lump/ Fine	Concentrates/	Lump 30%/	Lump 50%/ Fine		Concentrates/			Concentrates/ Pig iron/ Semi-	Fines/ Pig iron/ Semi-		
Type of product		Fine 25%	for pelletising	40% Fine	Pellets	Pellets	(Brockman)	Pellets	Fine 70%	50%	Pellets	Pellets	Lump/ Fine	Concentrates	finished	finished	Fines/ Pellets	Lump/ Fine
Note: FVs are not adjuste	d for CAPE	-X																

Note: EVs are not adjusted for CAPEX
(1) Assuming US\$50 per annual production for a pellet plan

Source: Company data, some Canaccord Adams estimates



Figure 12: Labrador Iron Mines Holdings key financial data

Labrador Iron Mines	LIR.CN		FY end-March				
Profit & Loss							
In CAD '000s unless otherwise stated							
Year to March	20	008E	2009E	2010E	2011E	2012E	
Sales Revenue		-	-	63,357	128,774	166,954	
Other income		-	-	-	-	-	
Gross costs		364	7,250	29,986	58,687	89,044	
EBITDA		(364)	(11,250)	33,371	70,086	77,911	
Deprec'n & Amort'n		-	-	393	786	1,179	
EBIT		(364)	(11,250)	32,978	69,300	76,731	
Net Interest		493	1,854	1,354	2,535	4,657	
Profit Before Tax		129	(9,396)	34,332	71,835	81,388	
Income Tax		45	(2,960)	10,815	22,628	25,637	
Minorities		-	-	-	-	-	
Adjusted (core) net income		84	(10,032)	22,832	48,522	55,066	
EPS		0.00 -	0.17	0.63	1.32	1.50	
Diluted EPS		0.00 -	0.17	0.49	1.02	1.16	
Dividend per share		-	-	-	-	-	
Exceptional profit after tax		-	3,596	685	685	685	
Reported profit after tax		84	(6,436)	23,517	49,207	55,751	
Source: Company data, Canaccord Adams e	stimates						

Cash Flow, proforma					
In CAD '000s unless otherwise stated					
Year to March	2008E	2009E	2010E	2011E	2012
Cashflow from operations	(364)	(11,250)	33,371	70,086	77,911
Net dividends from investments / to minorities	-	-	-	-	-
Exploration expensed (incl. in CF from ops.)	-	-	-	-	-
Maintenance capex	-	-	(100)	(400)	(400
Net interest	(493)	(1,854)	(1,354)	(2,535)	(4,657
Tax paid	45	(2,960)	10,815	22,628	25,637
Other operating c-flow	911	9,628	(18,921)	(40, 186)	(41,96
Operating cashflow	100	(6,436)	23,811	49,593	56,530
Expansion capex	(65)	(7,500)	(22,500)	-	-
Net acquisitions	-	-	-	-	-
Exploration capitalised	-	-	-	-	-
Other investing cash flow	-	-	-	-	-
nvestment cash flow	(65)	(7,500)	(22,500)	-	-
Net capital raisings	52,776	-	-	-	-
Net borrowings	-	-	-	-	-
Distributions paid	-	-	-	-	-
Other financing cash flow	(3,380)	-	-	-	-
Financing cash flow	49,395	-	-	-	-
Forex	-	-	-	-	-
Net Cash Flow	49,430	(13,936)	1,311	49,593	56,530

As at 31-March	2008E	2009E	2010E	2011E	2012E
Cash & equivalents	49.458	35.522	36.832	86,425	142,956
Other current assets	10	10	10	10	10
Property, plant & equipment	1,371	8,871	31,078	30,692	29,913
Exploration	-	-	-	-	-
Other assets	80	80	80	80	80
Total assets	50,918	44,482	68,000	117,207	172,958
Current liabilities	1,569	1,569	1,569	1,569	1,569
Non-current liabilities	-	-	-	-	-
Minorites	-	-	-	-	-
Other liabilities	-	-	-	-	-
Net assets	49,349	42,913	66,431	115,638	171,389
Total equity	49,349	42,913	66,431	115,638	171,389
Gearing (nd/nd+e) %	45700%	-481%	-124%	-296%	-503%
Working capital	47,898	33,962	35,273	84,866	141,396
Net debt	(49,458)	(35,522)	(36,832)	(86,425)	(142,956)

Year to March	2008E	2009E	2010E	2011E	2012E
Profitability					
Return on equity	0.2%	-21.7%	41.8%	53.3%	38.4%
Return on assets	0.2%	-21.0%	40.6%	52.4%	38.0%
Return on invested capital	0.2%	-21.8%	41.8%	53.3%	38.4%
Return on capital employed	0.2%	-21.7%	41.8%	53.3%	38.4%
EBITDA margin	na	na	52.7%	54.4%	46.7%
EBIT margin	na	na	52.1%	53.8%	46.0%
Net profit margin	na	na	36.0%	37.7%	33.0%
Effective tax rate	34.8%	na	31.5%	31.5%	31.5%
Leverage					
Net Interest Cover (times)	na	na	na	na	na
Current Ratio (times)	31.5	22.6	23.5	55.1	91.1
Other					
Shares in issue (diluted)	24,064	48,027	48,027	48,027	48,027
Free Cashflow (\$ / share)	0.00	(0.13)	0.50	1.03	1.18
Cashflow after capex (\$ / share)	0.00	(0.29)	0.03	1.03	1.18
Cashflow before capex (\$ / share)	0.00	(0.13)	0.50	1.04	1.19
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Company data, Canaccord Adams estimates



## **INVESTMENT RISKS**

### **Reserves and Resources**

Although there is an abundance of historical drill data and surface trenching, LIM Holdings has yet to complete an NI 43-101 compliant resource estimation on the eight deposits it plans to develop. The James Deposit has been audited by an independent consultancy, but is yet to confirm resources on the remainder. In particular, the deposits further from Schefferville such as Howse and Kivivic will require an intensive programme over the coming years in order to confirm resources for development of Phase II and Phase III of the project. Given the experience of the previous operator and results of the independent audit, we believe it is reasonable to expect that historic resource estimates can be brought into a compliant category.

## Metallurgical

Limited testwork on the ore has been carried out by LIM Holdings. Once the physical and chemical properties of the ore have been determined, we can increase confidence in our assumptions for recovery and product pricing. Variations in properties such as hardness, specific gravity, abrasion and liberation may impact directly on operating costs.

## **Permitting**

Construction permits are expected by the end of 2008. We see timely permitting as the major risk to the project timeline. Net impact / benefit agreements are also needed with First Nations groups, and the company acknowledges several First Nations groups in the immediate area of the properties. We expect Environmental Impact Studies will also be required. Surface rights issues between LIM Holdings and adjacent claim holders affecting mining and other plans at the James and Houston deposits may need to be resolved before any permit applications can be finalised. Approximately one-eighth of the James deposit and one-third of the Houston deposit lie on adjacent claims held by others. This is not expected to restrict the project proceeding into production, and LIM Holdings intends to resolve the issue in due course.

## Off-take agreements

LIM Holdings is yet to sign off-take agreements. It is most likely these will follow once product specifications have been better defined in the full feasibility study. While at this stage we see no reason why the Schefferville ore will not be able to find a market, the first major off-take agreement generally acts as a solid endorsement for the product. Subsequently, this would offer greater support to our valuation model and pricing assumptions.

## Normal mining industry risks

Metal prices may not match our assumptions, and exchange rate fluctuations may impact company earnings. Both capital and operating costs could differ from our assumptions. Further, there are operating risks involved in all mining operations. Technical, environmental, regulatory, and political risks could all impact our financial estimates and suggested valuation range.



## **NOTES**



## **NOTES**



## **NOTES**



#### **APPENDIX: IMPORTANT DISCLOSURES**

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#### **Site Visit:**

An analyst has visited the issuer's material operations in Labrador. Partial payment or reimbursement was received from the issuer for the related travel costs.

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	Coverage	IB Clients	
Rating	#	%	%
Buy	294	61.8%	43.9%
Speculative Buy	57	12.0%	70.2%
Hold	112	23.5%	33.0%
Sell	13	2.7%	0.0%
	476	100.0%	

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Company	Disclosure
Labrador Iron Mines Holdings Ltd.	1A, 2, 3, 7

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